HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 10002669-1

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

nventor(s):

Raja Daoud, et al.

Confirmation No.: 6164

Application No.:09/751,009

Examiner: Sall, E. H. M.

Filing Date:

12-29-2000

Group Art Unit: 2157

Title:

APPARATUS AND METHOD FOR IDENTIFYING A REQUESTED LEVEL OF SERVICE FOR

**A TRANSACTION** 

Mail Stop Appeal Brief-Patents Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1450

## TRANSMITTAL OF APPEAL BRIEF

c	:		
J	ł	ı	٠

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on \_\_\_\_\_\_\_.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

#### (complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

(	)			xtension of time oths checked belo	ees: 37 CFR 1.17(a)-(d)
		( )	one month	\$120.00	
		( )	two months	\$450.00	
		( )	three months	\$1020.00	
		( )	four months	\$1590.00	

- ( ) The extension fee has already been filled in this application.
- (X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of \$500.00. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as	Respectfully submitted,
first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA	Raja Daoud, et al.
22313-1450. Date of Deposit: 11-02-2005 OR  I hereby certify that this paper is being transmitted	By 3
to the Patent and Trademark Office facsimile  number on	Gregory W. Osterloth
Number of pages:	Attorney/Agent for Applicant(s) Reg. No. 36,232
Typed Name: Gregory W. Osterloth	Date: 11-02-2005

Rev 12/04 (Aplbrief) Telephone No.: (303) 291-3200



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No.: 09/751,009

Confirmation No. 6164

Appellant: Raja Daoud, et al. Filed : December 29, 2000

TC/A.U. : 2157

Examiner : Sall, El Hadji Malick

Docket No. : 10002669-1

Board of Patent Appeals and Interferences United States Patent and Trademark Office PO Box 1450 Alexandria VA 22313-1450

## **APPEAL BRIEF**

#### **Table of Contents**

## Section:

Table of Contents	
Real Party in Interest	
Related Appeals and Interferences	
Status of Claims	4
Status of Amendments	
Summary of Claimed Subject Matter	6
Grounds of rejection to be Reviewed on Appeal	8
Argument	9
Claims Appendix	<b>A</b> -1
Evidence Appendix	B-1
Related Proceedings Appendix	C-1

11/08/2005 MWDLDGE1 00000023 082025 09751009

01 FC:1402

500.00 DA



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

ppl. No. : 09/751,009

Confirmation No. 6164

Appellant : Raja Daoud, et al. Filed

: December 29, 2000

TC/A.U. : 2157

Examiner : Sall, El Hadji Malick

Docket No. : 10002669-1

Board of Patent Appeals and Interferences United States Patent and Trademark Office PO Box 1450 Alexandria, Virginia 22313-1450

## APPEAL BRIEF

Dear Sir:

This Appeal Brief is submitted in response to the Examiner's Final Office Action dated July 5, 2005.

Appellants filed a Notice of Appeal on September 2, 2005.

## Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, Texas 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.

## **Related Appeals and Interferences**

There are no related appeals and/or interferences.

## **Status of Claims**

Claims 1-5, 9, 14, 15, 17 and 18 are pending, all of which stand rejected. A copy of the claims is attached as a Claims Appendix to this Appeal Brief.

## **Status of Amendments**

All amendments have been entered.

## **Summary of Claimed Subject Matter**

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. §41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

In one embodiment (claim 1), apparatus for identifying a requested level of service (p. 3, line 28) for a transaction (p. 3, line 30) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The program code comprises: program code for prompting a user to select a requested level of service for said transaction (p. 9, lines 21-23; FIG. 8, 800); and program code for assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In another embodiment (claim 5), apparatus for identifying a requested level of service for a transaction (p. 3, line 30) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The program code comprises: program code for selecting said requested level of service for said transaction (p. 9, lines 21-23; FIG 8, 800), said requested level of service being based on a user identification (p. 7, line 30-p. 8, line 9; p. 9, lines 15-19); and program code for assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In yet another embodiment (claim 9), a method for requesting a level of service for a transaction on a network (p. 16, lines 12-12; FIG 8, 800) comprises: selecting said requested level of service for said transaction via a user interface (p. 9, line 22); and assigning said requested level of service to said transaction (p. 16, lines 18-20; FIG. 8, 810).

In still another embodiment (claim 14), apparatus for routing (p. 15, line 13) a transaction over a network based on a requested level of service associated with said transaction (p. 15, lines 13-16) comprises computer readable program code (p. 15, line 15) stored in computer readable storage media (p. 15, line 16). The computer readable program code comprises: a) program code for selecting said requested level of service for said transaction (p. 9, lines 21-23; FIG 8, 800); b) program code for assigning (p. 16, lines 18-20; FIG. 8, 810) a service tag (FIG. 2, 200) to said transaction, said service tag including said requested level of service (p. 7, lines 17-19), and said program code assigning parts of said service tag at more than one point on said network (p. 17, lines 9-13; FIG. 9, 910, 925, 935, 930, 940, 945); c) program code for reading said requested level of service from said service tag (p. 11, lines 11-16); and d) program code for directing said transaction over said network based on said requested level of service read from said service tag(FIG. 3; p. 10, lines 18-23).

## Grounds of Rejection to be Reviewed on Appeal

- I. Whether claims 1-4 should be rejected under 35 USC 103(a) as being unpatentable over Chuah (US Pat. No. 6,377,548) in view of Jepson (US Pat. No. 6,366,581).
- II. Whether claims 5, 9, 14, 15, 17 and 18 should be rejected under 35 USC 102(e) as being unpatentable over Chuah (US Pat. No. 6,377,548).

#### Argument

I. Whether claims 1- 4 should be rejected under 35 USC 103(a) as being unpatentable over Chuah (US Pat. No. 6,377,548) in view of Jepson (US Pat. No. 6,366,581).

Appellants' claim 1 recites:

1. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and

computer readable program code stored in said storage media, comprising:

- a) program code for prompting a user to select a requested level of service for said transaction; and
- b) program code for assigning said requested level of service to said transaction.

With respect to claim 1, the Examiner asserts that Chuah teaches "selecting a requested level of service for a transaction" in column 33, lines 41-56. Appellants disagree.

Chuah states:

Upon receiving an associate request frame from a wireless mode, after the AP has successfully authenticated the wireless modem. . .if it is desirable to provide different QoSs to different users (albeit potentially from the same wireless modem), then each user is given a different connection identity.

Col. 33, lines 41-56.

Thus, Chuah teaches that different QoSs may be provided to different "users", or different "connections of a user", by means of giving each user a different "connection identity". However, Chuah does not make any mention of different QoSs being provided to different "transactions" (which are more granular than "users" or "connections of a user").

The Examiner attempted to rebut the above argument in his Final Office Action, asserting that, in column 33, lines 41-56,

...Chuah discloses providing different QoSs to different connections (i.e. it is inherent that when there is connection, there is transaction, then by providing QoSs to connections, 'requested level of service to said transactions is assigned or provided').

7/5/2005 Final Office Action, p. 3, §b.

Appellants disagree. Although the assignment of a QoS to a user or connection may indirectly cause a QoS to be associated with all of the transactions that are generated by a user (or all of the transactions that pass through a connection), the assignment of a QoS to a user or connection is not the same as the assignment of a "requested level of service" to a specific "transaction".

The Examiner further asserts that Chuah teaches "program code for assigning said requested level of service to said transaction" in FIG. 16 and in column 33, lines 41-56. Appellants disagree. What Chuah's FIG. 16 discloses is the assignment of "service tags" to each of a node's packets. However, there is no indication by Chuah that these service tags are the elements that indicate a QoS. Rather, "A service tag is used to schedule the transmission order of the packets from the hosts. ..". See, Chuah, col. 9, lines 61-63.

Finally, the Examiner admits that Chuah fails to teach "prompting a user to select a requested level of service for [a] transaction". However, the Examiner asserts that this is taught by Jepson, which teaches a "method and apparatus for generating permanent virtual connections using [a] graphical user interface." See, 4/11/2005 Office Action, sec. 3, p. 3. More specifically, the Examiner asserts that Jepson teaches "prompting the user" in col. 9, lines 13-14.

In col. 9, line 8 – col. 10, line 3, Jepson discusses the selection of "traffic descriptors" and "traffic parameters", such as a "Peak Cell Rate of High Priority Cells", a "Peak Cell Rate of Low Priority Cells", a "Sustained Cell Rate of High Priority Cells" and others. A user's selection or setting of these parameters is used to establish a "permanent virtual connection". See, Jepson, col. 3, lines 30-31. Jepson defines a permanent virtual connection as follows:

A permanent virtual connection is a connection from one side of a switch to the other side of the switch.

Jepson, col. 1, lines 46-47.

A permanent virtual connection can be compared to a "nailed-up" connection in conventional telephone equipment. In a nailed-up connection, two parties who need to communicate often, can avoid per-call toll charges. In this case, every time the dedicated telephone equipment is used, the only user who can be reached is the other party. On the other hand, a permanent virtual connection and a nailed-up connection can both be contrasted with a "switched virtual connection," which is comparable to the standard dialed-in connection used in conventional telephone equipment. In a switched virtual connection, the telephone user decides who to call every time the telephone is picked up. The parameters which determine routing and connections from one side of a switch to the other side of the switch are determined separately for every call, based on the number dialed by the user.

Jepson, col. 1, line 66 - col. 2, line 14.

From the above teachings of Jepson, it appears that a permanent virtual connection is a dedicated connection between a user and one or more endpoints. However, the voice, video or data packets that are transmitted over such a connection are routed in a predefined manner. That is, where two network parties (or endpoints) need to communicate frequently, or on a regular basis, a permanent virtual connection may be established so as to eliminate the need to route packets between the parties on a "per transaction" basis (e.g., a per-call basis). Although the connection itself may be established based on traffic estimates that are input to a user interface, these traffic estimates do not appear to be assigned to any particular transaction.

Given that Jepson's teachings are directed to the creation of a permanent virtual connection over which transactions are routed in a predefined manner, rather than to a system where transactions are dynamically routed based on information (e.g., a "requested level of service") that is assigned to particular transactions, Appellants do not believe it would have been obvious to combine Jepson's teachings with Chuah's teachings. That is, Jepson's disclosure that a user may be prompted to

provide traffic parameters for creating a "permanent virtual connection" would not make it obvious to prompt a user to select a requested level of service that is then assigned to a transaction.

For at least the above reasons, claim 1 is believed to be allowable over Chuah's and Jepson's teachings.

Claims 2-4 are believed to be allowable at least for the reason that they depend from claim 1.

II. Whether claims 5, 9, 14, 15, 17 and 18 should be rejected under 35 USC 102(e) as being unpatentable over Chuah (US Pat. No. 6,377,548).

#### a. Claim 5

Appellants' claim 5 recites:

5. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and computer readable program code stored in said storage media, comprising:

- a) program code for selecting said requested level of service for said transaction, said requested level of service being based on a user identification; and
- b) program code for assigning said requested level of service to said transaction.

With respect to claim 5, the Examiner asserts that Chuah teaches the selection of a requested level of service, based on user identification, in col. 33, lines 41-56. The Examiner further asserts that Chuah teaches "program code for assigning said requested level of service to said transaction" in FIG. 16. Appellants respectfully disagree.

What Chuah's FIG. 16 discloses is the assignment of "service tags" to each of a node's packets. However, these service tags do not designate QoS. Rather, "A

service tag is used to schedule the transmission order of the packets from the hosts.

..". See, Chuah, col. 9, lines 61-63.

With respect to QoS, Chuah states:

. . .If it is desirable to provide different QoSs to different connections from the same user, then different connection cookies are assigned to the same user; similarly, if it is desirable to provide different QoSs to different users (albeit potentially from the same wireless modem), then each user is given a different connection identity.

Chuah therefore discloses 1) the assignment of different service tags to different packets, and 2) the respective assignment of different QoS cookies or identities to different connections or users. Note that Chuah does not disclose the assignment of QoS tags to packets, but only to connections or users. There is no indication by Chuah that QoS tags assigned to connections or users are subsequently assigned to packets. Claim 5 is therefore believed to be allowable over Chuah's teachings.

#### b. Claim 9

Claim 9 is believed to be allowable at least for reasons similar to why claim 1 is believed to be allowable. See, Section I of these Arguments.

#### <u>c. Claims 14, 15, 17 and 18</u>

Claim 14 is believed to be allowable at least for reasons similar to why claim 5 is believed to be allowable. In addition, claim 14 is believed to be allowable in that Chuah does not disclose "program code for reading said requested level of service from said service tag" or "program code for directing said transaction over said network based on said requested level of service read from said service tag." The

Examiner asserts that the former is taught by Chuah at col. 30, lines 59-61.

However, these lines only teach the assignment of service tags to packets. As already discussed, Chuah does not teach that the service tags incorporate QoS designators.

The Examiner asserts that Chuah teaches the direction of a transaction based on a requested level of service read from a service tag at col. 31, lines 13-15, and in FIG. 15A. Appellants respectfully disagree. Chuah teaches the *queuing* of packets at an access point based on service tags, but does not teach 1) the incorporation of QoS designators into the service tags, or 2) the *directing of transactions over a network* based on QoS designators.

Claims 15, 17 and 18 are believed to be allowable at least for the reason that they depend from claim 14.

## Conclusion

In summary, the art of record does not teach nor suggest the subject matter of Appellants' claims 1-5, 9, 14, 15, 17 and 18. These claims are therefore believed to be allowable.

Respectfully submitted, DAHL & OSTERLOTH, L.L.P.

By:

Gregory W. Osterloth Reg. No. 36,232 Tel: (303) 291-3200

## Claims Appendix

1. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and

computer readable program code stored in said storage media, comprising:

- a) program code for prompting a user to select a requested level of service for said transaction; and
- b) program code for assigning said requested level of service to said transaction.
- 2. An apparatus, as in claim 1, wherein said transaction is a packetized signal comprising at least a data packet, and wherein a service tag is associated with said data packet by said program code for assigning said requested level of service, said service tag including said requested level of service.
- 3. An apparatus, as in claim 1, further comprising:
  - a) program code for selecting a backup level of service; and
  - b) program code for assigning said backup level of service to said transaction.
- 4. An apparatus, as in claim 1, wherein said requested level of service is a predefined service category.

5. An apparatus for identifying a requested level of service for a transaction, comprising:

computer readable storage media; and computer readable program code stored in said storage media, comprising:

- a) program code for selecting said requested level of service for said transaction, said requested level of service being based on a user identification; and
- b) program code for assigning said requested level of service to said transaction.
- 6. (canceled)
- 7. (canceled)
- 8. (canceled)
- 9. A method for requesting a level of service for a transaction on a network, comprising:

selecting said requested level of service for said transaction via a user interface; and

assigning said requested level of service to said transaction.

11. (canceled)

12. (canceled)

13. (canceled)

14. An apparatus for routing a transaction over a network based on a requested level of service associated with said transaction, comprising:

a number of computer readable storage media; and computer readable program code stored in said number of storage media, comprising:

- a) program code for selecting said requested level of service for said transaction;
- b) program code for assigning a service tag to said transaction, said service tag including said requested level of service, and said program code assigning parts of said service tag at more than one point on said network;
- c) program code for reading said requested level of service from said service tag; and
- d) program code for directing said transaction over said network based on said requested level of service read from said service tag.

15. An apparatus, as in claim 14, wherein said transaction is directed over said network to a device best providing said requested level of service.

16. (canceled)

- 17. An apparatus, as in claim 14, wherein said service tag is read by program code at more than one point on said network.
- 18. An apparatus, as in claim 14, further comprising program code for changing said requested level of service included on said service tag.
- 19. (canceled)
- 20. (canceled)

## **Evidence Appendix**

None.

## **Related Proceedings Appendix**

None.